

Title (en)

HYBRID SEED SELECTION AND SEED PORTFOLIO OPTIMIZATION BY FIELD

Title (de)

HYBRIDAATAUSWAHL UND OPTIMIERUNG DES SAAT-PORTFOLIOS NACH FELD

Title (fr)

SÉLECTION DE GRAINES HYBRIDES ET OPTIMISATION DE PORTEFEUILLE DE SEMENCES PAR CHAMP

Publication

**EP 3706533 A1 20200916 (EN)**

Application

**EP 18876245 A 20181108**

Priority

- US 201715807876 A 20171109
- US 2018059844 W 20181108

Abstract (en)

[origin: US2019139158A1] Techniques are provided for generating a set of target hybrid seeds with optimal yield and risk performance, including a server receiving a candidate set of hybrid seeds along with probability of successful yield values, associated historical agricultural data and property information, and selecting a subset of the hybrid seeds that have probability of success values greater than a filtering threshold. The server generates representative yield values for hybrid seeds based on the historical agricultural data and risk values for each hybrid seed. The server generates a dataset of target hybrid seeds for planting based on the risk values, the yield values, and the properties for the target fields. The dataset of target hybrid seeds includes target hybrid seeds that meet a specific threshold for a range of risk values. The server causes display of the dataset of target hybrid seeds including yield values and risk values for the target fields.

IPC 8 full level

**A01B 79/00** (2006.01); **A01C 7/10** (2006.01); **G06N 5/04** (2006.01); **G06N 7/00** (2006.01); **G06Q 10/10** (2012.01); **G06Q 50/02** (2012.01)

CPC (source: EP US)

**A01B 79/005** (2013.01 - EP); **A01C 21/00** (2013.01 - EP); **G06N 3/006** (2013.01 - EP); **G06N 3/126** (2013.01 - EP); **G06N 5/01** (2023.01 - EP);  
**G06N 7/01** (2023.01 - US); **G06N 20/10** (2019.01 - EP); **G06N 20/20** (2019.01 - EP); **G06Q 10/0635** (2013.01 - EP);  
**G06Q 50/02** (2013.01 - EP US); **A01C 21/005** (2013.01 - EP)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**US 11562444 B2 20230124; US 2019139158 A1 20190509;** AR 113475 A1 20200506; BR 112020009205 A2 20201013;  
BR 112020009205 B1 20240220; CA 3081022 A1 20190516; CA 3081022 C 20220927; CN 111565557 A 20200821;  
CN 111565557 B 20230404; EP 3706533 A1 20200916; EP 3706533 A4 20210825; MX 2020004866 A 20201014; US 2023177622 A1 20230608;  
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DOCDB simple family (application)

**US 201715807876 A 20171109;** AR P180103263 A 20181109; BR 112020009205 A 20181108; CA 3081022 A 20181108;  
CN 201880085903 A 20181108; EP 18876245 A 20181108; MX 2020004866 A 20181108; US 2018059844 W 20181108;  
US 202318096488 A 20230112; ZA 202003425 A 20200608; ZA 202104543 A 20210630